



AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

1. (Currently Amended) A sensor ~~Sensor~~-element, whereby a magnetic field and the sensor element are ~~relatively-movable past~~relative to each other, the sensor element comprising:
_____ a laminated structure having a shape, ~~and a form~~, suitable to cause a change in magnetization in the sensor element without an energy supply if the magnetic field moves relative to ~~is moved relatively past~~ the sensor element, and to store several such changes.

2. (Currently Amended) The sensor ~~Sensor~~-element according to claim 1, wherein the change results in a domain wall arising, ~~arises in~~ the sensor element if the magnetic field moves relative to ~~is relatively moved past~~ the sensor element, and ~~wherein several domain walls, are storeable in the sensor element.~~

3. (Currently Amended) The sensor ~~Sensor~~-element according to claim 1, wherein the laminated structure has at least one soft magnetic layer, at least one non-magnetic metal layer[[,]] or at least one insulation layer, and at least one hard magnetic layer in sequence upward or downward.

4. (Currently Amended) The sensor ~~Sensor~~-element according to claim 3, wherein one of either
_____ at least one anti-ferromagnetic layer is arranged on an ~~follows upon the~~ uppermost or undermost hard magnetic layer, ~~or~~
_____ at least one non-magnetic metal layer and at least one hard magnetic layer are arranged on

~~the uppermost or the undermost hard magnetic layer follow thereupon, which together with the hard magnetic layer form an artificial anti-ferromagnetic layer; and, or preferably~~
_____ at least one non-magnetic metal layer; and at least one hard magnetic layer are arranged on the uppermost or the undermost hard magnetic layer, which together with the hard magnetic layer form an artificial anti-ferromagnetic layer, follow.

5. (Currently Amended) The sensor ~~Sensor~~-element according to claim 1, wherein the shape of the laminated structure ~~sensor element~~ has at least one first region designated as wall generator, and at least one second region designated as a wall storage unit.

6. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein the wall generator is constructed in such a way, that the magnetization in the wall generator follows ~~can easily follow the moving-magnetic field moving relative to the sensor element.~~

7. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein the wall generator is ~~constructed~~ basically circular in shape.

8. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein the wall storage unit is constructed in such a way, that the magnetization in the wall storage unit is basically not altered by the ~~moving-magnetic field~~ moving relative to the sensor element.

9. (Currently Amended) The sensor ~~Sensor~~-element according to claim 8, wherein the wall storage unit is constructed to be elongated.

10. (Currently Amended) The sensor ~~Sensor~~-element according to claim 8, wherein the wall storage unit has at least one constriction.

11. (Currently Amended) The sensor ~~Sensor~~-element according to claim 8, wherein the wall storage unit has at least one locally restricted, ~~selectively installed~~ change in the magnetic properties.

12. (Currently Amended) The sensor ~~Sensor~~-element according to claim 11, wherein at least one locally restricted hard magnetic layer is provided to call forth the at least one a locally restricted change in the magnetic properties of the wall storage unit.

13. (Currently Amended) The sensor ~~Sensor~~-element according to claim 8, wherein the wall storage unit has at least two contacts.

14. (Currently Amended) The sensor ~~Sensor~~-element according to claim 10, wherein the wall storage unit has two contacts for each one of the at least one of ~~per~~ constriction, ~~and per~~ locally restricted change.

15. (Currently Amended) The sensor ~~Sensor~~-element according to claim ~~11~~ 13, wherein the wall storage unit has two contacts for each one of the at least one ~~at least one of per~~ constriction ~~and per~~ locally restricted change, ~~and wherein at least one of the constriction, and the change is~~ situated ~~somewhat centrally between the contacts.~~

16. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein a

region of the shape connecting the wall generator and passes over into the wall storage unit is with a wedge-shaped part.

17. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein the wall storage unit has is provided with a tip on an end opposite the wall generator.

18. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein the wall storage unit is covered with a ~~the~~ covering layer.

19. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, wherein several wall storage units are allocated to a single wall generator.

20. (Currently Amended) The sensor ~~Sensor~~-element according to claim 1, wherein at least one electric conductor track is laid over the sensor element.

21. (Currently Amended) The sensor ~~Sensor~~-element according to claim 1, wherein a ~~the number of stored changes of magnetization can be~~ is determined using at least one of the Giant Magneto Resistance (GMR) effect, the Tunnel Magneto Resistance (TMR) effect, and a magneto-optical method, and a magneto-strictive method.

22. (Currently Amended) The sensor ~~Sensor~~-element according to claim 5, 21, wherein the wall storage unit has at least two contacts, and ~~wherein~~ the electrical resistance between the at least two contacts changes as a function of ~~the~~ a number of stored changes in the wall storage unit ~~magnetization.~~

23. (Currently Amended) The sensor element according to claim 1, wherein the sensor element is included in a Wheatstone bridge including four sensor elements according claim 1.

24. (Currently Amended) A revolution ~~Revolution~~ counter including at least one a sensor element according to claim 1, ~~or a Wheatstone bridge according to claim 23.~~

25. (Currently Amended) The revolution ~~Revolution~~ counter according to claim 24, wherein the magnetic field is generated ~~generateable~~ by at least one permanent magnet, ~~permanent magnets.~~

26. (Currently Amended) The revolution ~~Revolution~~ counter according to claim 24, wherein the at least one sensor element is a plurality of sensor elements and the plurality of several sensor elements are provided, that are arranged in approximately equal angular distances from one another, and at which the magnetic field is moveable.

27. (Currently Amended) The revolution ~~Revolution~~ counter according to claim 24, wherein the revolution counter is used in a motor vehicle, and ~~wherein~~ the magnetic field is coupled with a steering shaft of the motor vehicle.

28-29. (Cancelled)

30. (New) The sensor element according to claim 10, wherein the wall storage unit also has at least one locally restricted change in the magnetic properties.

31. (New) The sensor element according to claim 30, wherein the at least one locally restricted change is arranged in the at least one constriction.

32. (New) The sensor element according to claim 30, wherein the wall storage unit has at least two contacts and each of the at least one constriction and the at least locally restricted change is arranged between the at least two contacts.